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For
Continued Examination (RCE)
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Application Number	09/853,487
Filing Date	May 10, 2003
First Named Inventor	Robert M. Best
Art Unit	3714
Examiner Name	Carmen White
Attorney Docket Number	493-25-3

3714-
#17
K. Jeff
1/8/04

This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application. Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, or to any design application. See Instruction Sheet for RCEs (not to be submitted to the USPTO) on page 2.

1. **Submission required under 37 C.F.R. 1.114** Note: If the RCE is proper, any previously filed unentered amendments and amendments enclosed with the RCE will be entered in the order in which they were filed unless applicant instructs otherwise. If applicant does not wish to have any previously filed unentered amendment(s) entered, applicant must request non-entry of such amendment(s).

- a. ☐ Previously submitted. If a final Office action is outstanding, any amendments filed after the final Office action may be considered as a submission even if this box is not checked.

- i. ☐ Consider the arguments in the Appeal Brief or Reply Brief previously filed on _____
ii. ☐ Other _____

- b. ☒ Enclosed

- i. ☒ Amendment/Reply
ii. ☐ Affidavit(s)/Declaration(s)

- iii. ☒ Information Disclosure Statement (IDS)
iv. ☐ Other _____

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2. **Miscellaneous**

- a. ☐ Suspension of action on the above-identified application is requested under 37 C.F.R. 1.103(c) for a period of _____ months. (Period of suspension shall not exceed 3 months; Fee under 37 C.F.R. 1.17(i) required)
b. ☐ Other _____

3. **Fees** The RCE fee under 37 C.F.R. 1.17(e) is required by 37 C.F.R. 1.114 when the RCE is filed.

- a. ☐ The Director is hereby authorized to charge the following fees, or credit any overpayments, to Deposit Account No. _____

- i. ☐ RCE fee required under 37 C.F.R. 1.17(e)
ii. ☐ Extension of time fee (37 C.F.R. 1.136 and 1.17)
iii. ☐ Other _____

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385.00 OP

- b. ☒ Check in the amount of \$ 1,051.00 enclosed

- c. ☐ Payment by credit card (Form PTO-2038 enclosed)

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SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED

Name (Print /Type)	Jeffrey T. Haley	Registration No. (Attorney/Agent)	34,834
Signature	<i>Jeffrey T. Haley</i>	Date	December 12, 2003

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

19/C
K. Cobb
1/8/04

Applicant: Robert M. Best
Title: LINKED PORTABLE AND VIDEO GAME SYSTEMS
Serial Number: 09/853,487
Filing Date: May 10, 2001
Examiner: Carmen White
Art Unit: 3714
Attorney Docket No: 493-25-3

CERTIFICATE OF MAILING OR TRANSMISSION

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TECHNOLOGY CENTER R3700

REQUEST FOR CONTINUED EXAMINATION

Dear Sir,

In response to the Office Action dated November 18, 2003, please continue the examination and enter the following response:

Amendments to the Claims begin on page 2 of this paper.

Remarks/arguments begin on page 3 of this paper.

A clean listing of claims (pages 1-19) begins after page 15 of this paper.

12/17/2003 MDANTE1 00000048 09853487

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Appl. No. 09/853,487

Amdt. dated Dec. , 2003

Reply to Office action of Nov. 18, 2003

Amendments to the Claims:

Please cancel claims 59 - 280 without disclaimer or prejudice.

Please add new claims 281 - 374 (including 3 independent claims).

Appl. No. 09/853,487

Amdt. dated Dec. , 2003

Reply to Office action of Nov. 18, 2003

REMARKS / ARGUMENTS

In the Office Action dated November 18, 2003, the Examiner rejected claims 59-71 and withdrew from consideration claims 208-277. The action recited that claims 278-280 were also withdrawn from consideration but no such claims have been filed. To minimize possible confusion, new claims are numbered beginning with 281. All prior claims have been cancelled. Applicant herewith submits new claims 281 - 374 which more clearly define the invention. These new claims include three independent claims: data carrier claim 281, method claim 323, and system claim 357, all of which are closely parallel and have the same elected species (3D video games with a dual-system data link, class 463-32).

Applicant's claim 281 claims a data carrier for use in a video game (console) apparatus containing a first processor that is digitally linked to a separately housed portable game system containing a second processor and a discrete display device (such as an LCD). The data carrier carries (a) first game instructions that cause the first processor to generate first data representing plural body parts of a first player-controlled character moving in a first simulated 3-dimensional game world for display (for example on a TV screen). The data carrier also carries (b) second game instructions that cause the first processor to transfer game data through a data transmission link to the second processor to cause the second processor to generate second data representing plural body parts of a second player-controlled character moving in a second simulated 3-dimensional game world for display on the discrete display device.

In applicant's invention, which links the two systems together and generates 3-D worlds in both of the systems, the portable LCD can display characters with the same arms, legs, eyes, mouth, and complex body movements that are displayed on the video screen. The LCD can show animated pictures of the characters, instead of mere symbolic representations of the characters. The LCD and video screen can simultaneously show two different views of the same character in the same 3-D game world, or in two different 3-D game worlds, or two interacting characters in different parts of a 3-D game world, etc. This will provide much more realism and enjoyable game play than the prior art provides, because it allows each player to experience two different perspectives on one world, or two different related worlds, at the same time, creating greater mental engagement.

Novelty

The Examiner rejected claims 59-71 under 35 USC 102(e) as being anticipated by Fujimoto et al (6,238,291) or Miyamoto et al (6,132,315). As indicated by the Examiner, both Fujimoto and Miyamoto teach a game system with a game apparatus with a first processor; a first control device; a portable game system; a second processor; and a second manipulatable control device.

In data carrier claim 281, game data is transferred from a video game console to a portable game system to cause the second processor to generate second data that represents plural body parts of a second player character that moves in a simulated 3-dimensional game world for display on a discrete display device (LCD) in the portable game system. This novel feature is not shown, described, or suggested by either Fujimoto or Miyamoto or by any of the other cited references.

In Fujimoto, the words: "dimension" or "3D" or "3-D" are not mentioned. None of the Fujimoto drawings show a 3-dimensional game world as required in applicant's claim 281 and the illustrated objects (for example, objects 411 and 412 in Fig. 9(B)) are flat and 2-dimensional. Moreover, the word "character" appears only once in Fujimoto, at column 7 line 2, and it is used only in the sense of alphabetic characters or symbols.

Clearly Fujimoto does not anticipate applicant's present invention defined by claim 281 that requires a player character in a 3-dimensional game world that is displayed on a portable game system.

In the 35 USC 102(e) rejection, the Examiner referred to Miyamoto's Fig. 1. This Fig. 1 does not show a data transmission link between video game apparatus 20 (second game machine) and portable game system 10 (first game machine) as required in applicant's claim 281. The subject matter shown in Miyamoto's Fig. 1, i.e. a data memory cartridge 15 for manually transferring backup data from portable game machine 10 to video game machine 20, is not the subject of applicant's claims and is not shown nor suggested in applicant's present application. Applicant's claim 281 therefore distinguishes over Miyamoto's Fig. 1 and related description in Miyamoto columns 6 through 10 and column 11 lines 1 - 29.

Applicant's "data transmission link" that appears in claim 281 may use wires or be wireless as described in applicant's specification at page 8 lines 8-11 with reference to Fig. 8. This data transmission link is not the manual process described by Miyamoto with reference to his Fig. 1.

Moreover, in Miyamoto's specification at column 9 line 63 through column 10 line 16, referring to Fig. 1 and Fig. 2, CPU processor 11 in the portable game (first) machine 10 generates display data representing a player character in response to a player's manual operation of controller 14 for display on LCD 17, but there is no mention of this generating of display data having a causal relationship to data received by portable game machine 10 from video game apparatus (second) 20, either by transferring game data by manually moving RAM cartridge 15 or otherwise.

If, for the sake of argument, the wire "cord" or "communication cable" described at column 11 lines 56-63 and column 13 lines 7-14 with reference to Fig. 3 were used in Fig. 1 (as suggested in Miyamoto column 7 lines 46-47) to connect portable game machine 10 to video game apparatus 20, there is no suggestion in Miyamoto that generation of display data by CPU processor 11 in portable system 10 for display on LCD 17 would in any way be influenced by data generated in system 20 and transmitted on the cord or cable to portable system 10 or CPU processor 11. Instead the "backup data" is transmitted by wire or cartridge from the portable system 10 to video system 20, and not the reverse.

Miyamoto's specification from column 11 line 30 to column 12 line 3 with reference to Fig. 3 discloses a data transmission link sending "backup data" from connector 13 in portable game machine 10 by way of a "cord" (not shown in Fig. 3) that is connected to connector 23e of video game apparatus 20. At column 11 lines 56-63 Miyamoto discloses that when the two game machines are so connected by a "cord" or "communication cable" (column 13 lines 7-14), "the game play operation on the second-machine 20 may be implemented by using the first machine [portable

game machine 10] controller 14 in place of the controller 24.” Controller 24 is shown in Miyamoto Fig. 4 and is a handheld video game controller used by a player to control video game apparatus 20 which displays on TV set 40 as indicated in column 13 lines 5-6. When portable game machine 10 is used “in place of the controller”, the “backup data” is transferred from portable game machine 10 to video game apparatus 20. Although the data bus arrows in systems 10 and 20 are shown as bi-directional in Miyamoto, there is no disclosure in Miyamoto of game data being transferred from video game apparatus 20 through the communication cable or equivalent to portable game machine 10 as required by applicant's claim 281.

According to Miyamoto from column 9 line 59 to column 10 line 4, a player may manipulate controller 14 to control “a player character (character making motions in response to player's operation)” for display of the player character on LCD 17. However, there is no suggestion in Miyamoto that such motion of a player character may also be affected by game data transferred by wire or other non-manual data transmission from video game apparatus 20 to portable game machine 10 as required by applicant's claim 281.

If Miyamoto had disclosed or suggested “captured-animal capability data” or other types of data listed in column 10 lines 9-14 and lines 40-42 and in Fig. 2 as being transferred from video game apparatus 20 to portable game machine 10 to affect generation of characters for display on LCD 17, it would be expected that at least one example of such an LCD character would be shown in a drawing. However, a search of Miyamoto's drawings and description found no such character or drawing depicting an LCD 17 screen image, and only one description example of a

player character being displayed on LCD 17, at column 9 line 63 through column 10 line 4, with no mention of game data from video game apparatus 20.

Figures 20, 21 and 22 in Miyamoto clearly show a monster character with plural body parts on a display screen, but which display screen is used is not indicated in the figures. Fig. 20 is discussed at column 16 lines 57-67 in connection with step S39 in the Fig. 11 flowchart. Fig. 21 is discussed at column 17 lines 1-27 in connection with step S42 in the Fig. 12 flowchart. And Fig. 22 is discussed at column 17 lines 28-34 in connection with step S48 in the Fig. 12 flowchart. Within the discussion in columns 16 through 17 of process steps in Figures 11 and 12, there are references to "analog joystick" and "second-machine 20" (the video game console apparatus), but there are no references to "first-machine" (the portable game machine 10), CPU 11, or LCD 17 in columns 16-17. Hence, the monster characters in Figures 20, 21, and 22 appear only on the TV screen (CRT 40) generated by video game apparatus 20, and not on LCD 17. There is no drawing of LCD 17 displaying a character.

In the entire Detailed Description (columns 6-20) there are only two references to LCD 17 (at column 7 line 40 and column 10 line 4). Miyamoto does not indicate, in either of these paragraphs, that generating a player character for display on LCD 17 in portable game system 10 should be affected by processing in video game apparatus 20 or by data transferred from video game apparatus 20 to system 10.

In Miyamoto, at column 7 lines 31-32, processor 11 in portable game machine 10 is described as: "for example, an 8-bit CPU" and at column 7 lines 15-16: "the

first-machine 10 may employ, for example, an 8- or 16- bit video game machine.”

The kind of images generated in portable game machine 10 are described at column 9 lines 28-30: “For example, if the first-machine [portable 10] game program is to display second-dimension images, the second-machine [20] program may be to represent three-dimension images...” This display of 2-dimensional images and 8-bit or 16-bit processors in Miyamoto clearly indicate that 3-dimensional game worlds were not contemplated for display on LCD screen 17. In contrast, applicant’s claims are limited to 3-dimensional game worlds in both the video game apparatus and the portable game system.

Therefore, Miyamoto does not anticipate applicant’s present invention of claim 281 that requires a second processor in a portable game system generating second data representing plural body parts of a player-controlled character in a 3-dimensional game world for display on a discrete display device (LCD) in the portable game system.

In US patent 6,478,679 (Himoto), Fig. 18 shows a portable game system 10 with an LCD screen displaying a player character with plural body parts, but this portable game system 10 is connected to a video game system 60 only for downloading mini-game software. The portable game system 10 is then disconnected from system 60 for independent operation. In the words of Himoto column 14, lines 61-64 “Then, the game player removes the memory card 10 and operates the memory card alone to play the downloaded mini-game.” Memory card 10 is defined as a “portable game apparatus” in column 15 line 13. Playing a game on both portable game apparatus 10 and system 60 while they are connected together is not shown,

described, or remotely suggested in Himoto. Moreover, there is no suggestion in Himoto that any LCD image may be 3-dimensional. The words "dimension", "dimensional", "three", "3D", or "3-D" do not appear in Himoto. Therefore, Himoto does not anticipate applicant's claims.

Obviousness

It is well known that portable game systems can be programmed to display simple player-controlled characters moving in a simple simulated game world displayed on an LCD. However, none of the cited references show, describe, or suggest player characters with plural body parts in a 3-dimensional game world being displayed on an LCD in a portable game system linked to a video game (console) apparatus.

Figures 20, 21, 22, and 24 in Miyamoto show characters with plural body parts, but these are for display on CRT 40 (TV). If LCD display of characters in a linked system were obvious to Miyamoto and co-inventors, why did they not provide even one example in the drawings? Display of player characters on LCD 17 is briefly mentioned in column 9 lines 58-67 and column 10 lines 1-4, but this is without benefit of a data transmission link. When such a link is described in column 11 lines 29-62, there is no mention of LCD 17. This would be a strange omission if it were obvious to combine the elements of Fig. 1 and Fig. 3.

But even if, for the sake of argument, they were combined, the data flow is from the portable system to the console system, the reverse of that defined in applicant's claim 281. If this reverse flow were important, why did Miyamoto neglect to mention it? Because it was not obvious that anything useful could be accomplished by the

console-to-portable data flow, other than displaying words and downloading game software as shown and described in Himoto.

However, Himoto does not show, describe, or suggest playing a linked system game with player characters on both the LCD screen and TV screen. A character is shown in Fig. 18 on the LCD screen of portable game system 10, but this character is not being controlled while the two systems are linked together. The link in Himoto is used only for downloading a mini-game, not for playing a linked game. If it were obvious to have both game systems generating a character or characters and displaying them on both screens while the two systems were linked, at least one example would have been shown or suggested in Himoto, but was not.

Even if, for the sake of argument, the downloading and multi-part characters disclosed by Himoto were combined with the portable-to-console data linked system disclosed in Miyamoto and the bi-directional 2-dimensional linked displays disclosed by Fujimoto, a combination not suggested by any cited reference, this combination would not produce a display of 3-dimensional game worlds on the linked LCD portable game system as defined in applicant's claim 281, because it was not obvious to display multi-part characters in 3-dimensional worlds on portable game systems designed for 2-dimensional side-scrolling games when linked to polygon-rendering systems designed for 3-dimensional game worlds.

Tomizawa (GB 2,353,928) shows in Fig. 12 an example of two "player objects" displayed on an LCD in a portable game machine in a linked multi-system game. But the "player objects" displayed on LCD 17 are geometric symbols, not characters

with plural body parts as required by applicant's claim 281. In Fig. 11 Tomizawa shows a 3-dimensional world, but again each "player object" consists of only one body part, i.e. a geometric symbol. If it were obvious to generate images of people and other characters with plural body parts in a 3-dimensional world on LCD 17 in portable game machine 10 linked by wire 30 to video game system 20 so that a 3-dimensional, dual-system, dual-display game could be played, why is no example of such a game shown, described, or suggested in Tomizawa? Because it was not obvious to Tomizawa, a person skilled in the art.

In a later application of Miyamoto (US 2002/0165028), Figures 4, 5, and 9 show "characters" in a 3-dimensional world displayed on LCD screen 20 in a linked, multi-system game, but these "characters" are cubes, pyramids, cones, and other geometric objects, not characters with plural body parts required by applicant's claim 281. Even as recently as May 2, 2001, the priority date for the Miyamoto '028 application, it was still not obvious to Miyamoto and co-inventors that displaying full bodied multi-part animated characters on portable LCD screens would be a significant improvement or appropriate for linked systems.

In an earlier Miyamoto patent (US 6,139,433, Figures 1, 25, 27E-27J) and several other patents for non-linked video game systems, Miyamoto showed the Nintendo character Mario in the drawings as an example of a 3-dimensional player character generated by the game system for display on a TV screen. But when Miyamoto, the game expert who invented Mario, chose examples of characters to illustrate LCD displays in the linked multi-system game apparatus disclosed in Miyamoto '028, he chose geometric objects instead of Mario as illustrative characters. If it were

obvious to generate player characters with plural body parts in a 3-dimensional game world for LCD display in linked game systems, why did Miyamoto choose geometric objects instead of his multi-part Mario? Clearly, it was not obvious to Miyamoto or his co-inventors to display multi-part characters on portable LCD screens when linked to a game console that would provide multi-part characters.

The cited references illustrate how game experts overlooked the present invention because they regarded the linked portable game system as an LCD-equipped controller. Miyamoto '315 column 11, line 60-62 said: "the game play... may be implemented by using the first-machine" [GameBoy] "in place of the controller". As long as they regarded the linked portable game system as a smart controller or as an LCD "memory card" in a controller (Himoto), they overlooked the possibility of the linked portable game system having images of animated characters with plural body parts in 3-dimensional game worlds.

Because portable game systems were stereotyped as smart controllers in linked systems, the possibility of portable game systems providing supplementary displays of multi-part characters in 3-dimensional worlds in linked systems was overlooked. The long-standing assumption that portable game systems would not provide 3-D and multi-part characters when linked to video game systems that do provide 3-D and multi-part characters, is evidence that applicant's invention was not obvious.

None of the cited references show, describe, or suggest that the LCD in a linked portable game system should display multi-part characters in a 3-dimensional game world. In stark contrast, applicant's specification on page 16 lines 21-24 clearly

states that “The polygons which form the image of hand 37 on LCD 22 are then modified by microprocessor 50 (Fig. 4) to show hand 37 grasping pipe 35 on LCD 22.” Microprocessor 50 is shown in portable game system 28 in applicant’s Fig. 4 which provides joystick 20 for analog 3-dimensional manual control, a control that is absent in the portable game systems illustrated in the cited references.

Applicant anticipated that it would soon be cost effective to enhance portable game systems with the ability to generate textured polygons for 3-dimensionality on the LCD screen. But meanwhile, non-polygon 3-dimensional images could be displayed on existing portable game system LCDs by generating multi-part characters from short line segments, a non-limiting example illustrated in Fig. 23b and 23c. These temporary and long-term solutions to a problem in linked game systems were not mentioned in the cited prior art because applicant’s invention was not obvious to video game experts.

Applicant’s invention is classified in a crowded art and therefore the novel, non-obvious improvements defined by the present claims should be regarded as significant.

Arguments directed above to claim 281 may also be directed to independent claims 323 and 357 and claims dependent thereon.

For these reasons, it is clear that applicant’s pending claims define an invention that is novel, non-obvious, and a significant advance over the prior art.

Summary

1. None of the cited references suggest applicant's invention of displaying game characters with plural body parts in a 3D world on an LCD in a linked system.
2. Combining the cited references would not result in the game system that is defined by applicant's claims.
3. Applicant's invention uses portable game systems in a new way that was not contemplated in the prior-art and not obvious to game experts.
4. Applicant's invention solved a long-standing problem, i.e. how to provide games with dual displays of full-bodied characters in 3-dimensional worlds.
5. Applicant's invention greatly expands the kinds of games that can use a linked game system compared to those limited to LCD controllers.
6. 3-dimensional video games are a crowded art and therefore applicant's small step forward is significant.

Applicant submits that the present pending claims are allowable and a favorable decision is respectfully requested.

Respectfully submitted,

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Listing of Claims:

Claims 1 - 207 (cancelled)

Claims 208 - 280 (cancelled)

281 (new): A data carrier for use in a video game apparatus having a first processor that is digitally linked to a separately housed portable game system containing a second processor and a discrete display device, the data carrier carrying game program instructions comprising:

- 21
- (a) first game instructions that cause said first processor to generate first data representing plural body parts of a first player-controlled character moving in a first simulated 3-dimensional game world for display on a first display device; and
 - (b) second game instructions that cause said first processor to transfer game data through a data transmission link to said second processor to cause said second processor to generate second data representing plural body parts of a second player-controlled character moving in a second simulated 3-dimensional game world for display on said discrete display device in said portable game system.

282 (new): The data carrier of claim 281, wherein said data carrier is an optically coded disk.

283 (new) : The data carrier of claim 281, wherein said data carrier is a portable memory device for storing digital data and programs.

284 (new) : The data carrier of claim 281, wherein said first and second simulated 3-dimensional game worlds are substantially the same game world.

285 (new) : The data carrier of claim 281, wherein said first and second player-controlled characters are substantially the same character.

286 (new) : The data carrier of claim 281, wherein said first and second player-controlled characters are 3-dimensional.

287 (new) : The data carrier of claim 281, further comprising program instructions that cause said first processor to detect a predetermined condition, and program instructions that cause transmission of control data to said second processor to cause said second processor to execute program instructions that modify said second data if said predetermined condition is detected.

288 (new) : The data carrier of claim 287, wherein said predetermined condition is defined as one of said player-controlled characters contacting an object in one of said 3-dimensional game worlds.

289 (new) : The data carrier of claim 287, wherein said predetermined condition is defined as one of said player-controlled characters being manually controlled to enter a predetermined area in one of said 3-dimensional game worlds.

290 (new) : The data carrier of claim 287, wherein said predetermined condition is defined as manual selection of an object in one of said 3-dimensional game worlds.

291 (new) : The data carrier of claim 287, wherein said predetermined condition is defined as one of said player-controlled characters grasping an object in one of said 3-dimensional game worlds.

292 (new) : The data carrier of claim 287, wherein said predetermined condition is defined as one of said player-controlled characters moving away from an object in one of said 3-dimensional game worlds.

293 (new) : The data carrier of claim 287, wherein said modified data represents a body part of said second player-controlled character.

294 (new) : The data carrier of claim 287, wherein said modified data represents a hand of said second player-controlled character.

295 (new) : The data carrier of claim 281, wherein data representing movements of at least one of said player-controlled characters are generated in response to manual operation of at least one control member in said portable game system.

296 (new) : The data carrier of claim 281, wherein at least a portion of said transferred game data specifies a variable direction of movement in said second data of at least one of said body parts of said second player-controlled character.

297 (new) : The data carrier of claim 281, wherein at least a portion of said transferred game data specifies a variable location in said second data of at least one of said body parts of said second player-controlled character.

298 (new) : The data carrier of claim 281, wherein at least a portion of said transferred game data specifies any of the following variables: operation code, size factor, object identifier, character identifier, picture identifier, unit identifier, location, velocity, rotation, direction, or other variables.

299 (new) : The data carrier of claim 281, wherein at least a portion of said transferred game data is program instructions for execution in said second processor.

300 (new) : The data carrier of claim 281, further comprising graphics data that said first processor transfers through a data transmission link to said second processor in said portable game system and from which graphics data said second processor generates picture data for display on said discrete display device.

301 (new) : The data carrier of claim 281, wherein said body parts are articulated and bendable under control of at least one manipulatable control device.

302 (new) : The data carrier of claim 281, wherein said body parts comprise articulated fingers that are controlled by at least one manipulatable control device.

303 (new) : The data carrier of claim 281, wherein said body parts comprise any of the following: arm, leg, hand, finger, head, face, eye, mouth, claw, shoe, clothing, and other body parts.

304 (new) : The data carrier of claim 281, wherein said body parts of said first and second characters are rendered as textured polygons.

305 (new) : The data carrier of claim 281, further comprising program instructions that said first processor transfers through a data transmission link to said second processor to cause said second processor to generate said second data.

306 (new): The data carrier of claim 281, further comprising data that said first processor transfers through a data transmission link to said second processor to cause said second processor to detect a predetermined condition, and to cause said second processor to execute program instructions that modify said second data if said predetermined condition is detected.

307 (new): The data carrier of claim 281, further comprising data that causes said second processor to execute program instructions that enlarge a selected area of said second simulated game world for display on said discrete display device.

308 (new): The data carrier of claim 281, further comprising data that causes said second processor to execute program instructions that reduce in size a selected area of said second simulated game world for display on said discrete display device.

309 (new): The data carrier of claim 281, wherein at least one of said player-controlled characters is a human-like character.

310 (new): The data carrier of claim 281, wherein at least one of said player-controlled characters is a non-human character.

311 (new): The data carrier of claim 281, wherein at least one of said player-controlled characters is an inanimate object having plural parts.

312 (new) : The data carrier of claim 281, wherein said second processor transfers control data to said first processor to cause said first processor to select program instructions from said data carrier for execution.

313 (new) : The data carrier of claim 281, further comprising picture data and wherein said second processor transfers control data to said first processor to cause said first processor to select said picture data from said data carrier for display.

314 (new) : The data carrier of claim 281, wherein said data carrier is an optically coded disk comprising a physical feature that is difficult to duplicate for authentication of said disk.

315 (new) : The data carrier of claim 281, wherein said data carrier is an optically coded disk further comprising a circular bar code that is burned into said disk after pressing.

316 (new) : The data carrier of claim 315, wherein said circular bar code comprises data for authentication of said disk.

317 (new) : The data carrier of claim 315, wherein said circular bar code comprises data that is cryptographic.

318 (new) : The data carrier of claim 315, wherein said circular bar code comprises data that is substantially unique for each disk.

319 (new) : The data carrier of claim 281, further comprising a program of third game instructions that are encrypted.

320 (new) : The data carrier of claim 281, further comprising first encrypted data and second data providing a cryptographic key in encrypted form for use in decrypting said first encrypted data.

321 (new) : The data carrier of claim 281, further comprising data that is encrypted with a public key crypto system.

322 (new) : The data carrier of claim 281, further comprising data storing apparatus for fabricating said data carrier.

323

(new) : For use in a game system having a video game apparatus containing a first processor, a data transmission link, and a separately housed portable game system containing a second processor and a discrete display device, a method of operating said game system comprising the steps of:

- (a) executing a first game program in said first processor to generate first data that represents plural body parts of a first player-controlled character moving in a first simulated 3-dimensional game world for display on a first display device;
- (b) digitally transferring game data from said first processor through said data transmission link to said second processor; and
- (c) executing a second game program in said second processor to generate second data in accordance with said transferred game data in said portable game system, the second data representing plural body parts of a second player-controlled character moving in a second simulated 3-dimensional game world for display on said discrete display device in said portable game system.

324 (new) : The method of claim 323, wherein said first and second player-controlled characters are substantially the same character.

325 (new) : The method of claim 323, wherein said first and second simulated 3-dimensional game worlds are substantially the same game world.

326 (new) : The method of claim 323, further comprising the step of generating data representing plural body parts of one of said characters moving from said first simulated 3-dimensional game world to said second simulated 3-dimensional game world.

327 (new) : The method of claim 323, further comprising the steps of detecting whether said second player-controlled character is in a predetermined display state, and for automatically modifying said second data if said predetermined display state is detected.

328 (new) : The method of claim 327, wherein said predetermined display state is defined as manual selection of an object displayed on said discrete display device.

329 (new) : The method of claim 327, wherein said predetermined display state is defined as one of said player-controlled characters contacting an object in said second simulated 3-dimensional game world displayed on said discrete display device.

330 (new) : The method of claim 327, wherein said predetermined display state is defined as one of said player-controlled characters grasping an object in said second simulated 3-dimensional game world displayed on said discrete display device.

331 (new) : The method of claim 327, wherein said predetermined display state is defined as one of said player-controlled characters moving away from an object in said second simulated 3-dimensional game world displayed on said discrete display device.

332 (new) : The method of claim 327, wherein said predetermined display state is defined as the current display size of a body part of one of said characters being smaller than a predetermined amount and said modified second data results in an enlarged image of the character's body part on said discrete display device.

333 (new) : The method of claim 332, wherein the enlarged body part is one of the character's hands.

334 (new) : The method of claim 332, wherein said modified second data is near a hand of one of said characters.

335 (new) : The method of claim 327, wherein said modified second data causes display of a modified body part of said second player-controlled character on said discrete display device.

336 (new) : The method of claim 323, wherein movements of at least one of said player-controlled characters are generated in response to manual operation of a control device that causes transfer of control data to said video game apparatus.

337 (new): The method of claim 323, further comprising the steps of:
storing said second game program in said video game apparatus;
and
digitally transferring said second game program from said video
game apparatus to said portable game system for execution in
said second processor.

338 (new): The method of claim 323, further comprising the steps of:
digitally reading said second game program from a data storage
device into said video game apparatus; and
digitally transferring said second game program from said video
game apparatus to said portable game system for execution in
said second processor.

339 (new): The method of claim 323, wherein said first game program
is stored on a data storage device and wherein said video game
apparatus reads said first game program from the data storage
device into said video game apparatus for execution in said
first processor.

340 (new): The method of claim 323, wherein said discrete display
device is a liquid crystal display (LCD) device.

341 (new): The method of claim 323, wherein said second game program
is stored in a program memory cartridge that is manually
removable from said portable game system.

342 (new) : The method of claim 323, wherein said portable game system comprises at least one manual control device that is a touch sensitive device.

343 (new) : The method of claim 323, wherein said transferred game data specifies a variable direction of movement in said second data of at least one of said body parts of said second player-controlled character.

344 (new) : The method of claim 323, wherein said transferred game data specifies a variable location in said second data of at least one of said body parts of said second player-controlled character.

345 (new) : The method of claim 323, wherein said transferred game data specifies any of the following variables: operation code, size factor, object identifier, character identifier, picture identifier, unit identifier, location, velocity, rotation, direction, or other variables.

346 (new) : The method of claim 323, wherein data representing at least one body part movement of one of said player-controlled characters is generated in response to manual operation of at least one control device in said portable game system.

347 (new) : The method of claim 323, wherein said body parts are articulated and bendable under control of at least one manipulatable control device.

348 (new) : The method of claim 323, wherein said body parts comprise articulated fingers that are controlled by at least one manipulatable control device.

349 (new) : The method of claim 323, wherein said body parts comprise any of the following: arm, leg, hand, finger, head, face, eye, mouth, claw, shoe, clothing, and other body parts.

C/ 350 (new) : The method of claim 323, further comprising the steps of generating data that represents a portion of said second simulated game world expanded in size for display on said discrete display device in response to manual operation of at least one control device.

351 (new) : The method of claim 323, further comprising the steps of generating data that represents a portion of said second simulated game world reduced in size for display on said discrete display device in response to manual operation of at least one control device.

352 (new) : The method of claim 323, wherein at least one of said player-controlled characters is a human-like character.

353 (new): The method of claim 323, wherein at least one of said player-controlled characters is a non-human character.

354 (new): The method of claim 323, wherein manipulation of at least one manually operative control device on said portable game system causes said second processor to generate control data and to transfer the control data to said first processor to control generation of said first data.

355 (new): The method of claim 323, wherein movement of said second player-controlled character is controlled by manual operation of a control device in said portable game system.

356 (new): The method of claim 323, wherein during part of the game said second data represents a miniature likeness of said first data which results in similar pictures being displayed on both displays.

357 (new) : A game system comprising:

- (a) a video game apparatus having a first processor for executing at least a first game program for generating first data that represents plural body parts of a first player-controlled character moving in a first simulated 3-dimensional game world for display on a first display device;
- (b) a portable game system having a discrete display device for displaying variable images and having a data memory for storing second data and having a second processor for executing at least a second game program for generating said second data in accordance with game data transferred from said first processor through a data transmission link;
- (c) said data transmission link for transferring said game data from said first processor to said second processor; and
- (d) said second processor for generating said second data that represents plural body parts of a second player-controlled character moving in a second simulated 3-dimensional game world for display on said discrete display device in said portable game system.

358 (new) : The game system of claim 357, further comprising a first ^(?)manipulatable control device for controlling movement of the body parts of said first player character and a second manipulatable control device for controlling movement of the body parts of said second player character.

359 (new) : The game system of claim 358, wherein said first and second control devices are housed in the same controller.

360 (new) : The game system of claim 358, wherein said first and second control devices are housed in said portable game system.

361 (new) : The game system of claim 357, wherein said first and second player-controlled characters are substantially the same character.

362 (new) : The game system of claim 357, wherein said body parts comprise articulated fingers that are controlled by at least one manipulatable control device.

363 (new) : The game system of claim 357, further comprising at least one manipulatable control device for selecting 3-dimensional directions in which said player-controlled characters are moved.

364 (new) : The game system of claim 357, wherein said discrete display device is a liquid crystal display (LCD) device.

365 (new) : The game system of claim 357, wherein said discrete display device displays a map of at least a portion of one of said game worlds.

366 (new) : The game system of claim 357, further comprising at least one touch-sensitive data entry device.

367 (new) : The game system of claim 357, further comprising at least one touch-sensitive data entry device that senses locations on said discrete display device of an object touching said data entry device.

368 (new) : The game system of claim 357, further comprising a manipulatable control device for enlarging and reducing a selected area of one of said game worlds for display on said discrete display device.

369 (new) : The game system of claim 357, further comprising a plurality of said portable game systems, each receiving game data transferred from said video game apparatus.

370 (new) : The game system of claim 357, wherein said first game program is stored on a program/data storage disk and wherein said video game apparatus further comprises a disk reader for reading said first game program from the storage disk.

371 (new) : The game system of claim 357, wherein at least a portion of said second game program is stored on a program/data storage disk and wherein said video game apparatus reads said portion of said second game program from the storage disk and transfers the second game program portion to said portable game system for execution in said second processor.

372 (new) : The game system of claim 357, wherein said data transmission link is partly wireless and excludes manual transfer of data.

373 (new) : The game system of claim 357, wherein said data transmission link is a wire link.

374 (new) : The game system of claim 357, further comprising means in said portable game system for generating textured polygons representing at least a portion of said second player-controlled character moving in at least 3-dimensions in said second simulated 3-dimensional game world.
